

In The Claims:

1. (original) A chip package structure comprising:

an organic substrate;

a die, wherein the die has an active surface, a backside that is opposite to the active surface, and a plurality of metal pads located on the active surface, whereas the backside of the die is adhered to the organic substrate; and

a thin-film circuit layer located on top of the organic substrate and the die and has an external circuitry, wherein the external circuitry is electrically connected to the metal pads of the die and extends to a region outside the active surface of the die, the external circuitry has a plurality of bonding pads located on a surface layer of the thin-film circuit layer and each bonding pad is electrically connected to the corresponding metal pad of the die.

Claims 2-5 (canceled)

6. (original) The structure in claim 1, wherein the thin-film circuit layer comprising at least a patterned wiring layer and a dielectric layer, the dielectric layer is located on top of the organic substrate and the die, and the patterned wiring layer is located on top of the dielectric layer, whereas the patterned wiring layer is electrically connected to the metal pads of the die through the dielectric layer and forms the external circuitry and the bonding pads of the external circuitry.

7. (original) The structure in claim 6, wherein the dielectric layer has a plurality of thru-holes, and the patterned wiring layer is electrically connected to the metal pads of the die by the thru-holes.

8. (original) The structure in claim 6, wherein a via is located inside each thru-hole, and the patterned wiring layer is electrically connected to the metal pads of the die by the vias.

9. (original) The structure in claim 6, wherein the patterned wiring layer and the vias form the external circuitry.

Claims 10-12 (canceled)

13. (original) The structure in claim 6, wherein a material of the dielectric layer is selected from a group consisting of polyimide, benzocyclobutene, porous dielectric material, and stress buffer material.

14. (original) The structure in claim 1, wherein the thin-film circuit layer comprising a plurality of patterned wiring layers and a plurality of dielectric layers, in which the patterned wiring layers and dielectric layers are alternately formed and the patterned wiring layers are electrically connected to the neighboring patterned wiring layers through the dielectric layer, one of the dielectric layers is formed between the thin-film circuit layer and the organic substrate, the patterned wiring layer that is closest to the organic substrate is electrically connected to the metal pads of the die through

the dielectric layer that is closest to the organic substrate, where the patterned wiring layer that is furthest away from the organic substrate forms the bonding pads.

15. (original) The structure in claim 14, wherein each of the dielectric layers has a plurality of thru-holes, by which each of the patterned wiring layer is electrically connected the neighboring patterned wiring layers, where the patterned wiring layer that is closest to the organic substrate is electrically connected to the metal pads of the die through the dielectric layer.

16. (original) The structure in claim 15, wherein a via is located in each thru-hole, by which the patterned wiring layers are electrically connected to the neighboring patterned wiring layers, where the patterned wiring layer that is closest to the organic substrate is electrically connected to the metal pads of the die by the vias.

17. (original) The structure in claim 16, wherein the patterned wiring layers and the vias form the external circuitry.

Claims 18-24 (canceled)

25. (original) The structure in claim 1 further comprising a filling layer located between a surface of the organic substrate and the thin-film circuit layer and surrounding the peripheral of the die, and a surface of the filling layer is planar to the active surface of the die.

26. (original) The structure in claim 25, wherein a material of the filling layer is selected from a group consisting of epoxy and polymer.

27. (original) The structure in claim 1 further comprising a passivation layer located on top of the thin-film circuit layer and exposing the bonding pads.

28. (original) The structure in claim 1 further comprising a plurality of bonding points located on the bonding pads.

29. (original) The structure in claim 28, wherein the bonding points are selected from a group consisting of solder balls, bumps, and pins.

Claims 30-175 (canceled)

176. (original) A chip package structure comprising:

an organic substrate;

a die module comprising an active surface, a backside that is opposite to the active surface, and a plurality of metal pads located on the active surface, whereas the backside of the die module is adhered to the organic substrate;

a filling layer located on top of the organic substrate and surrounding a peripheral of the die module, a top surface of the filling layer is planar to the active surface of the die module;

a thin organic layer located on top of the filling layer and the die module; and

a thin-film circuit layer located on top of the thin organic layer and the die module

and has an external circuitry, wherein the external circuitry is electrically connected to the metal pads of the die module and extends to a region outside the active surface of the die module, the external circuitry has a plurality of bonding pads located on a surface layer of the thin-film circuit layer and each bonding pad is electrically connected to a corresponding metal pad of the die module.

177. (original) The structure in claim 176, wherein the die module comprising a single die.

Claims 178-179 (canceled)

180. (original) The structure in claim 176, wherein a material of the filling layer is selected from a group consisting epoxy and polymer.

Claims 181-185 (canceled)

186. (original) The structure in claim 176, wherein the thin-film circuit layer comprising at least a patterned wiring layer, which is located on the thin organic layer, whereas the patterned wiring layer is electrically connected to the metal pads of the die module through the thin organic layer and forms the external circuitry and the bonding pads of the external circuitry.

187. (original) The structure in claim 186, wherein the thin organic layer has a plurality of thru-holes, and the patterned wiring layer is electrically connected to the metal pads of the die module by the thru-holes.

188. (original) The structure in claim 187 wherein a via is located inside each thru-hole, and the patterned wiring layer is electrically connected to the metal pads of the die module by the vias.

189. (original) The structure in claim 188, wherein the patterned wiring layer and the vias form the external circuitry.

Claims 190-192 (canceled)

193. (original) The structure in claim 176, wherein the thin-film circuit layer comprising a plurality of patterned wiring layers and a plurality of dielectric layers, in which the patterned wiring layers and dielectric layers are alternately formed and the patterned wiring layers are electrically connected to the neighboring patterned wiring layers through the dielectric layer, one of the dielectric layers is formed between the thin-film circuit layer and the organic substrate, the patterned wiring layer that is closest to the organic substrate is electrically connected to the metal pads of the die module through the dielectric layer that is closest to the organic substrate, where the patterned wiring layer that is furthest away from the organic substrate forms the bonding pads.

194. (original) The structure in claim 193, wherein the thin organic layer has a plurality of first thru-holes, by which the patterned wiring layer that is closest to the organic substrate is electrically connected to the metal pads of the die module, and each dielectric layer has a plurality of second thru-holes, by which the patterned wiring layers are electrically connected to the neighboring patterned wiring layers.

195. (original) The structure in claim 194, wherein a first via is located inside each first thru-hole and a second via is located inside each second thru-hole, and each patterned wiring layer is electrically connected to the neighboring patterned wiring layers by the second vias, wherein the patterned wiring layer that is closest to the organic substrate is electrically connected to the metal pads of the die module by the first vias.

196. (original) The structure in claim 195, wherein the patterned wiring layers, the first vias, and the second vias form the external circuitry.

Claims 197-199 (canceled)

200. (original) The structure in claim 193, wherein a material of the dielectric layer is selected from a group consisting of polyimide, benzocyclobutene, porous dielectric material, and stress buffer material.

Claim 201 (canceled)

202. (original) The structure in claim 176 further comprising a plurality of bonding points located on the bonding pads.

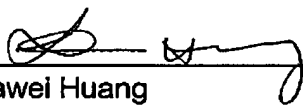
203. (original) The structure in claim 202, wherein the bonding points are selected from a group consisting of solder balls, bumps, and pins.

No new matter has been added to the application by the amendments made to the claims.

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